CLAIMS

1. (Currently Amended) A method of migrating from a current endpoint address to a new endpoint address by a migrator during a session between the migrator and a non-migrator in a packet-based communication system, the method comprising the steps of:

(a) changing, in the migrator, the current endpoint address to the new endpoint address;

(b) suspending transmission to the non-migrator of packets with the new endpoint address;

(c) informing the non-migrator, via a channel separate from the channel of the session between the migrator and the non-migrator, of the change to the new endpoint address; and

(d) resuming transmission to the non-migrator of packets with the new endpoint address.

2. (Original) The invention of claim 1, wherein step (a) comprises the steps of logically changing to the new endpoint address and updating a kernel structure of the migrator.

3. (Original) The invention of claim 2, wherein the migrator changes to the new current address by changing from a current 5-tuple comprising the current endpoint address to a new 5-tuple comprising the new endpoint address, and updating the kernel structure of the migrator comprises modifying a socket with the current 5-tuple to reflect the new 5-tuple, the socket being associated with the session.

4. (Original) The invention of claim 2, wherein step (a) comprises the steps of registering with the non-migrator before initiating the change to the new endpoint address.

5. (Original) The invention of claim 1, wherein step (b) comprises the steps of dropping packets from the non-migrator received at the network layer and suspending transmission of packets to the non-migrator at the transport layer.

6. (Currently Amended) The invention of claim 5, wherein the step of suspending transmission of packets to the non-migrator at the transport layer comprises preventing or resolving a race condition by applying one or more ~~suspends packet transmission during a race condition with~~ firewall-filtering rules to prevent session data from leaving the system until the migration process is complete.

7. (Original) The invention of claim 6, further comprising the step of dynamically adding and withdrawing the firewall-filtering rules for a given session during tuple update communication between the migrator and non-migrator.

8. (Original) The invention of claim 1, wherein step (c) comprises the steps of sending a control message to the non-migrator informing the non-migrator of the change to the new endpoint

address and receiving a confirmation from the non-migrator that the non-migrator has changed to the new endpoint address.

9. (Original) The invention of claim 1, wherein, for steps (a) through (d), the session conforms to a transmission control protocol and an Internet protocol.

10. (Original) The invention of claim 1, wherein the method is implemented in a processor of a node in a packet network.

11. (Original) The invention of claim 10, wherein, for step (d), the session comprises packets exchanged between the migrator and non-migrator in at least one of a wired communication network and a wireless communication network.

12. (Currently Amended) A method of migrating from a current endpoint address to a new endpoint address by a non-migrator during a session between the non-migrator and a migrator in a packet-based communication network, the method comprising the steps of:

(a) receiving, via a channel separate from the channel of the session between the migrator and the non-migrator, a control message indicating the migrator's change to the new endpoint address;

(b) changing, in the non-migrator, the current endpoint address to the new endpoint address;

(c) acknowledging, to the migrator, the non-migrator's change to the new endpoint address; and

(d) exchanging, with the migrator, packets of the session with the new endpoint address.

13. (Original) The invention of claim 12, wherein step (b) comprises the steps of logically changing to the new endpoint address and updating a kernel structure of the non-migrator.

14. (Original) The invention of claim 13, wherein the non-migrator changes to the new current address by changing from a current 5-tuple comprising the current endpoint address to a new 5-tuple comprising the new endpoint address, and updating the kernel structure of the non-migrator comprises modifying a socket with the current 5-tuple to reflect the new 5-tuple, the socket being associated with the session.

15. (Original) The invention of claim 13, wherein step (a) comprises the steps of registering the migrator before receiving the control message.

16. (Original) The invention of claim 12, wherein step (b) includes the step of continuing to receive packets from the migrator during the change.

17. (Original) The invention of claim 12, wherein, for step (d), the session conforms to a transmission control protocol and an Internet protocol.

18. (Original) The invention of claim 12, wherein the method is implemented in a processor of a node in a packet network.

19. (Original) The invention of claim 18, wherein, for step (d), the session comprises packets exchanged between the migrator and non-migrator in at least one of a wired communication network and wireless communication network.

20. (Currently Amended) A network comprising:

a migrator adapted to migrate from a current endpoint address to a new endpoint address during a session; and

a non-migrator adapted to migrate from a current endpoint address to a new endpoint address during a session,

wherein the migrator is adapted to:

i) change, in the migrator, the current endpoint address to the new endpoint address,

ii) suspend transmission to the non-migrator of packets with the new endpoint address,

(iii) inform the non-migrator, via a channel separate from the channel of the session between the migrator and the non-migrator, of the change to the new endpoint address, and

iv) resume transmission to the non-migrator of packets with the new endpoint address, and

wherein the non-migrator is adapted to:

i) receiving, via a channel separate from the channel of the session between the migrator and the non-migrator, a control message indicating the migrator's change to the new endpoint address,

ii) change, in the non-migrator, the current endpoint address to the new endpoint address,

(iii) acknowledge, to the migrator, the non-migrator's change to the new endpoint address, and

(iv) exchange, with the migrator, packets of the session with the new endpoint address.

21. (Currently Amended) A computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions including instructions which, when executed by a processor, cause the processor to implement a method for migrating from a current endpoint address to a new

endpoint address by a migrator during a session between the migrator and a non-migrator in a packet-based communication system, the method comprising the steps of:

(a) changing, in the migrator, the current endpoint address to the new endpoint address;

(b) suspending transmission to the non-migrator of packets with the new endpoint address;

(c) informing the non-migrator, via a channel separate from the channel of the session between the migrator and the non-migrator, of the change to the new endpoint address; and

(d) resuming transmission to the non-migrator of packets with the new endpoint address.

22. (Currently Amended) A computer-readable medium having stored thereon a plurality of instructions, the plurality of instructions including instructions which, when executed by a processor, cause the processor to implement a method for migrating from a current endpoint address to a new endpoint address by a non-migrator during a session between the non-migrator and a migrator in a packet-based communication network, the method comprising the steps of:

(a) receiving, via a channel separate from the channel of the session between the migrator and the non-migrator, a control message indicating the migrator's change to the new endpoint address;

(b) changing, in the non-migrator, the current endpoint address to the new endpoint address;

(c) acknowledging, to the migrator, the non-migrator's change to the new endpoint address; and

(d) exchanging, with the migrator, packets of the session with the new endpoint address.